



A Guide To Visually Impaired Target Sports

Archery and Shooting

AGINGCOURT
600



A Visible Difference Through Sport



Introduction

Welcome to the British Blind Sport 'Guide to Visually Impaired Target Sports'.

At British Blind Sport we believe that every person with a visual impairment has the right to participate in sport and physical activity. We understand that there are many hurdles and barriers to overcome in order for each visually impaired (VI) person to have the same access as a sighted person. Our educational resources have been created with the specific purpose to assist anyone who is delivering sport and physical activities with support, ideas and guidance on how to include people with a visual impairment.

This resource focuses on the target sports of Archery and Shooting and is a joint product between British Blind Sport and Agincourt 600 with contributions from Archery GB and British Shooting. This exciting project, kindly funded by Agincourt 600, has provided new initiatives for VI people to take part in both sports across the country. This resource has been designed to educate the coaching and club network to ensure a greater knowledge of VI Archery and VI Shooting and help enhance opportunities for more VI people to take part in these exhilarating sports.

This resource will enable coaches, leaders and club personnel:

- Learn about sight loss and eye conditions.
- Have a better understanding of the needs of people with a visual impairment.
- Apply their knowledge to meet the needs of people with a visual impairment.
- Use basic communication skills to support the needs of people with a visual impairment in sport and physical activity.
- Understand where you can obtain further support to ensure your club/group/activity is fully accessible and inclusive to people with a visual impairment.

By making small and simple adaptations you will be able to include people with a visual impairment in your sports and activity sessions. The information and tips that you will find in this resource will be beneficial to all the participants in your group, not just people living with sight loss.

Contributors Statements



**Alaina MacGregor, CEO,
British Blind Sport**

British Blind Sport is committed to providing sport and recreational opportunities for blind and partially sighted people living in Great Britain. We are determined to help those who are living with sight loss to have as many opportunities to participate in as wide a range of sport and leisure activities as possible and to live the life that they choose. Sport can be so much more than the activity itself. Research shows that sport can often

be the springboard for wider benefits such as increased wellbeing, a healthier lifestyle and renewed confidence. The positive effects of participation in sport and physical activity for a VI person, irrespective of ability or experience, cannot be underestimated. We know that ensuring participation in sport is a positive experience for a VI person is often due to a skilled and confident coach or teacher. This research is a fantastic and insightful tool for those coaches and teachers who want to help others achieve their sporting goals and who are committed to making a visible difference through sport.



Dr Sinclair Rogers, Chair, Agincourt 600



The Agincourt 600 charity was set up to celebrate the 600th anniversary of the Battle of Agincourt, one of the most famous and controversial battles in English history. The key part that longbows and archery played in the battle led the committee to pledge to support the advancement of archery and shooting for the disabled as well as supporting the advancement of education and arts. We could think of no better scheme to support disabled sport than this fantastic project. It has seen British Blind Sport support and create a number of opportunities for VI people to try and thrive at these brilliant sports. This resource will hopefully continue the good work that BBS has done and allow the deliverers of sport to carry on providing sporting opportunities in an informed and productive way. We are proud to support it.

Neil Armitage, CEO Archery GB



Archery is an inclusive sport, and as such we encourage participation in whatever form by those of every age, gender and ability.

Visually impaired archers shoot alongside everyone else and can aspire to many levels of archery, from simply being a recreational archer to being local, regional, national and international competitors.

We are delighted that our clubs and coaches have been involved in the creation of this project and resource. We hope that this will enable more VI people from across the nation and from every walk of life engaging with archery.

Ken Nash, NSRA committee member, BBS Chairman and Chairman of BBS Shooting Section.



Target shooting is a sport which would generally be perceived as being unsuitable for blind or partially sighted people. This could not be further from the truth!

As this educational resource will explain, it's a fantastic sport that any VI person can take part in and thrive. Participants find that physical and mental stamina, as well as concentration, are all improved. With the right training and practice outstanding scores can be achieved.

Across the UK there are more than 30 equipped clubs between them having excess of 200 regular participants. The number of clubs and participants continues to increase.

Although strong in the UK and a number of other countries, VI shooting is not currently included in the Paralympic Games. Moves are continuing to increase interest in International events with Paralympics the ultimate goal. With projects like Agincourt 600 and resources like this making the sport even more accessible to the VI community, we hope this will continue to grow the sport and we'll see more and more people taking up VI shooting.

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Understanding Sight Loss

The Facts

There are almost two million people in the UK living with sight loss. This figure includes approximately 360,000 people registered as blind or partially sighted, who have severe and irreversible sight loss.

Within this figure, there are over 25,000 blind and partially sighted children (aged 0-16).

The number of people with sight loss is set to increase in line with population ageing: by 2050 the number of people with sight loss in the UK could be nearly four million.

Sight Loss

Sight is classified in more than one measure. The main measures are 'visual acuity' and 'visual field'.

Visual acuity is a person's ability to see fine detail.

Visual field is the boundaries of what a person can see in one instant i.e. the entire area which can be seen without moving the eyes.

There is often confusion between the terms blind, visually impaired and partially sighted.

Sight loss is broken down into two main categories; severely sight impaired and sight impaired:

Severely sight impaired

This category is also known as blind.

- Under government legislation, a person who is severely sight impaired would be unable to perform a job for which eyesight is an essential element for the task.

- They will not be able to see a demonstration.
- They may become quickly disorientated during an activity.

Sight impaired

This category is also known as partially sighted.

- Partially sighted people will have some useful vision that they can use to navigate the world.
- They may not be able to see a demonstration.
- They may not be able to recognise you from a distance.

Severely sight impaired (blind) and Sight impaired (partially sighted) are collectively known as Visually Impaired (VI) or people living with sight loss.

Eye Conditions

There are a number of conditions that result in sight loss. These varying conditions affect blind and partially sighted people in different ways. For example, a visually impaired person may be totally blind or have blurred peripheral vision. It is important to remember that people are individuals with different levels of vision and varying support needs. Whilst there are many different conditions that result in sight loss, the majority of visually impaired people are likely to have one of the following four conditions:

Macular Degeneration

Macular degeneration is an eye condition that affects a small part of the retina at the back of the eye called the macular. It causes a loss of vision in the centre of the visual field, affecting vision when looking directly at something. People with this condition will usually have peripheral vision, but may struggle to recognise the faces of their teammates.



Glaucoma

Glaucoma causes a loss of peripheral vision due to damage to the optic nerve or increased eye pressure. This condition occurs gradually and will result in a significant reduction of peripheral vision over time. While treatment exists for glaucoma, it can't repair the existing sight loss.



Cataracts

Cataracts cause blurred or cloudy vision, the result of yellowy pigment on the lens of the eyes. This condition is the main cause of visual impairment across the globe. To treat cataracts, surgery can be used to remove the cloudy lens.



Diabetic Retinopathy

Diabetic retinopathy can affect anyone with diabetes. It causes floaters and blurred vision, resulting from damage to the retina due to high blood sugar levels.



Other conditions

Along with these four conditions, there are many other causes of sight loss. Visit the RNIB website for information on a specific eye condition.

www.rnib.org.uk/eye-health/eye-conditions

For archery, visually impaired athletes will need a sight classification to verify their level of sight loss in order to participate in a fair and equal way. See page 27 for details of the classification process.

For acoustic shooting, since the ability to see has no influence on results achieved using acoustic shooting equipment, it has been decided that in the UK there is not a need to classify athletes into groups of similar level of visual impairments.

Supporting Visually Impaired People in Target Sports

Preparation

As with any sports or activity session, preparation is paramount. The following adages are a good reminder to sports coaches and leaders of the importance of preparation.

- Prior Planning Prevents Poor Performance
- Fail to Plan – Plan to Fail

This section will outline some key factors to consider when delivering sport sessions to people with a visual impairment which will help with planning and ensure that the participant has a quality experience.

Advertising

The promotion and marketing of your sports session, club or activity is important to ensure people are aware of what your club offers, where you are located and what activities and programmes are accessible.

The way in which people with a visual impairment communicate and source information may be different to sighted people, so it is important to consider the following when advertising sessions:

- Provide information in an accessible format if required (e.g. braille, clear print or suitable electronic version for a screen reader).
- Advertise your sessions with local and national VI organisations such as British Blind Sport, RNIB, Guide Dogs or your local Blind Society.
- Many County Councils or Local Authorities provide a Sight Support Service for people living with sight loss. This could be an excellent method to promote your club or sessions to your target audience and engage with visually impaired people. British Blind Sport can advise on your local contacts. Contact BBS for further information.
- Use social media to promote your services. Evolving technology such as screen readers and smart phones makes social media a very accessible and popular medium for visually impaired people.
- Use appropriate images of visually impaired athletes in your marketing material. This will directly speak to your target market and help to inspire other visually impaired people to take part.

Travel

Following British Blind Sport research into 'Overcoming Barriers to Participation' a key barrier identified by visually impaired people is travel.

As many VI people rely heavily on public transport it is advisable to check public transport options and promote the nearest train station or bus route in any promotional or marketing material.

Additionally, there may be community transport options available. Local Sight Support Services will be able to provide information as to what services may be available.

Some participants may rely on a sighted guide or support worker who may assist the participant in getting to and from your club or session.

Session Venue and Time

It might be necessary to provide a meet and greet service for a VI participant, especially on their first visit to a club, venue or session. This can be discussed and arranged during any prior communication with a VI participant.

Ensure that staff at the venue have been briefed to inform them that a VI person will be attending the session.

Please consider that if possible, an afternoon session would be better for a VI person to get to and from your venue due to lighter conditions.

Further Reading

EFDS Inclusive Communications Guide:
<http://bit.ly/efdsguide>

Sport England Accessibility Audit Check List
<https://www.sportengland.org/media/30255/Accessible-Sports-Facilities-Audit-Check-List-October-2012.pdf>

BBS Barriers to Participation research
<http://www.britishblindsport.org.uk/overcoming-barriers-to-participation/introduction/>

Communicating with Visually Impaired people

It is important to understand the needs of a visually impaired person. Do not be afraid to ask questions to obtain as much information as you can that will aid in coaching and delivery.

- Remember to always introduce yourself by name to a VI participant.
- Always ask a VI person how much they can see.
- Find out if the VI person has had any sight previously. This may affect their understanding of a sport, game or task as well as understand distance and spatial awareness differently from someone who was born with sight loss.
- Establish if there is a preferred situation or environment that promotes better vision, for example a VI person may have better vision in their left eye, so by making a small change to where you stand to demonstrate a skill or task may make a huge difference.
- Take time to describe the environment, the details of a task, the layout of a room – this will help build confidence for a VI person.

Can the VI person access the venue independently? Do they need support in the changing area? To overcome any safety issues with young children discuss options with the child's parents, guardians or carers beforehand.

Correct Terminology

It is important to always use the correct terminology when referring to people with a visual impairment and discussing sight loss in general. Using the wrong type of language can create a barrier so by using appropriate terminology it will help you build lasting relationships with your participants and grow your participation programmes.

Words to use	Words to avoid
Person with a visual impairment	The blind
Person with sight loss	The handicapped
Visually impaired person	The disabled
Partially sighted people	Visually impaired (when referring to an individual)
Blind people	Suffers from
has an impairment	

While it is important to use correct terminology, do not over think every sentence you say. For example, saying the term ‘See you later’ will not be offensive to the vast majority of VI people.

Further Reading

- Media Guide to reporting on persons with an impairment; International Paralympic Committee:

http://www.paralympic.org/sites/default/files/document/141027103527844_2014_10_31+guide+to+reporting+on+persons+with+an+impairment.pdf

- EFDS Inclusive Communications Guide – Access for all: inclusive communications

http://www.efds.co.uk/resources/case_studies/2697_access_for_all_efds_inclusive_communications_guide

- EFDS Talk To Me Research

http://www.efds.co.uk/resources/research/3253_talk_to_me_-_word_version



Guiding Visually Impaired People

A VI participant may require a sighted guide to assist them to and from your sports session.

A VI participant may also require a sighted guide during the sports or activity session to either assist when changing drills or tasks, or for the sports activity itself (such as running).

General Guiding

A VI participant may rely on a sighted person to assist them in accessing your sports facility. Not having access to a sighted guide may cause a barrier to participation. Guiding is a useful skill and easy to learn. As a coach, you can consider guiding the VI participant yourself or allocating the role to another member of the group. It's important that whoever guides the VI person, they must consider the following key points:

- **Identify yourself** and ask the VI person if they would like some assistance; don't just presume that they do or don't.



- Offer your **elbow or shoulder** to the VI person for them to take hold of. Ask them which side they prefer to be guided on. If guiding a child, they may want to hold your hand instead of your arm, or may just want to touch your arm. Ask them which technique they prefer.
- Ensure you are always **one step in front** of the person that you are guiding, don't walk too fast or too slowly, ask if they are happy with the pace.
- **Communicate** at all times e.g. steps (up or down), handrails. Describe what is around them and explain any changes in ground surface.
- When guiding a VI person to a seat, **place their hand on the back of the chair/bench**. Do not back them into the seat.
- When walking through doorways **ensure that the VI person steps behind you** and ensure that they do not get struck by the door or catch their fingers, etc.
- **Explain any loud noises.**
- Keep your guiding arm **still and relaxed**. Don't start waving it about or pointing at things.
- Remember to give the person you are guiding **adequate space around obstacles.**

Target Sports

Archery and Shooting are inclusive sports. Through the club system it enables participants of all ages, genders and physical and mental abilities to shoot together.

This section of the resource has been created to assist those delivering archery and shooting activities, providing support, ideas and guidance on how to include people with a visual impairment with the aim to help archery and shooting providers become VI friendly and improve accessibility through their provision of training, resources and support.

These include:

- Archery clubs
- Shooting clubs
- Leisure activity providers
- Schools

Making Target Sports Accessible for Visually Impaired People

Archery and Shooting can develop a number of skills, improve self-esteem and provide a safe environment to create enjoyable experiences. Furthermore, both sports are unique in that participants of all ages, genders and abilities can shoot together. This enhances the social and inclusivity benefits to participants.

To deliver these great experiences, coaches and organisers need to consider a number of factors when delivering archery or shooting sessions to people with a visual impairment.

Coaching visually impaired participants in target sports

It is possible to include VI people in an inclusive coaching group with sighted archers or sighted shooters. Both are inclusive sports which allow participants of all ages, genders and physical and mental abilities to participate together.

It is important that coaches and organisers are knowledgeable about working with VI participants. Like any interaction between

people, it is about assessing a situation and behaving appropriately.

General coaching advice

Effective and clear communication is key to ensuring that participants enjoy their archery or shooting experience. A coach may need to adapt their communication style to best support participants with visual impairments. Much of the guidance included below will address the challenges of communication as well as modification of equipment and processes to best support VI participants.

First impressions count

The first experience a VI participant is likely to have at a venue is meeting the coach and/or other organisers. First impressions are important. They help to put participants at ease in what can be an unfamiliar and potentially anxious situation. They also help to build a rapport between participant and coach.

In order to improve the effectiveness of the communication process, typical considerations include:-

- Announcing yourself by name when approaching a person or group; you may have to do this more than once to allow them to become familiar with the sound of your voice.
- Addressing a visually impaired participant by name or lightly touch them on the side of the arm to indicate you are talking to them; always ask before touching the archer/shooter.
- Verbalising body language (explain what you are doing); some participants with sight loss may not be able to read facial expressions or make eye contact.
- Smile and adopt a friendly and positive attitude; even though the participant may not be able to see you, your demeanour will be reflected in your voice.



Where to start

Remember that we are all different, so each person with a visual impairment will be different too. Their sight levels, personality, ability and fitness levels will vary. It is important not to generalise about visual impairments across participants but to understand how much the person can see and how to maximise the use of any sight they have.

As a starting point, it is essential for the coach to determine accurately the extent and type of visual impairment for each participant. This will enable the coach to ensure that the participant receives the best possible support.

In order to make the participant feel comfortable and to ensure confidentiality, it would be a good idea to meet with the person before a group session starts or take them aside away from the group at the start of the session before asking questions about their impairment.

Ask the participant what their visual impairment is and how it affects their ability to see. Also check to determine if there are other health considerations which should be taken into account. Eye conditions can often be linked to other medical conditions such as, for example, head injury, stroke or learning challenges.

Coaches should communicate with sensitivity when assessing a participant's condition. The archer or shooter may find it difficult to discuss this with a complete stranger, particularly if there are other people around.

Consideration should also be given to the stability of the impairment. It may be that a participant's visual condition is expected to deteriorate over time. This should be taken into account when planning coached activities.

It should also be noted that a participant's level of vision may vary on a daily basis. Their vision may be affected by changes in lighting or their general health. Consequently a participant may be able to carry out a task one day, but find it more difficult on another day.

Finally, remember that medical conditions must remain confidential. It is the choice of the archer or shooter as to whether they wish to share information with others.

It's ok to ask! If you don't know what you're dealing with, then you can't help the participant, so ensure that you have a full understanding of their abilities and limitations.

Environmental Factors

In the case of a partially sighted participant, environmental factors can influence how they are able to perform and how the coach might best communicate with them.

Archery

Typical factors include:

- The amount of available light.
- Changes in light, such as cloud cover, time of day.
- Type of light (such as the sun, fluorescent lights, floodlights, skylights in ceiling where changes to outdoor light can affect indoor lighting).
- Colour contrast - it may be preferable to use black and white or black and yellow target faces instead of the more typical, five-colour ones.
- Positioning of the archer and coach in relation to the light source; avoid having your back to a window or bright sunlight, as the reflection will make it more difficult for a partially sighted participant to see you.
- Level of background noise. For example, echoes, ventilation fans, sounds from bows being released, whistles.

Shooting

In addition to the above, there are other factors to consider, including:

- Shooting and some types of archery are indoor sport. Therefore overhead lighting and window light needs to be considered.
- Positioning of the participant in relation to the light source (as above).
- Sudden noises, prepare the participant for others to be shooting alongside them.
- Asking spectators to be as quiet as possible.

Visually Impaired Archery

Explaining Archery

The way a coach explains archery techniques and equipment will vary depending on the visual ability and history of the participant.

For example, a participant whose sight has reduced over time may have some understanding of what a bow, arrow or target look like. However, a participant who has been blind from birth may not have previously encountered archery and may have no concept of the equipment used nor the purpose of the activity.

Similarly, a partially sighted archer may be able to receive some degree of visual instruction and/or make use of some form of visual sighting aid, whereas a fully blind participant is likely to require much clearer verbal instruction and may need the use of a tactile sight.

It may be possible to coach a partially sighted archer in a similar way to their sighted peers, however this will depend on the extent and type of their visual impairment.

It is essential to ensure that verbal instructions are concise and accurate. If the archer struggles to understand instructions, they may be able to see sufficiently to copy the techniques of sighted archers.

Some general points for consideration when coaching VI archers include:-

- What descriptions you use when explaining an activity or action; clear communication is vital, so provide detailed explanations of skills, drills, equipment and rules
- Don't be afraid to use everyday language such as "see" or "look" when working with visually impaired archers

- Physical, manual demonstrations may be necessary and appropriate; a participant may find it useful to feel a clear demonstration of good technique in order to replicate it.
- Some visually impaired participants may require additional support, including hands-on adjustment, guiding or assisting with skills repetition.
- Wherever physical contact is required, or would add value, ensure that the participant is comfortable with this; ask first.
- Verbalise all instructions because hand movements and gestures are not always seen by visually impaired participants.
- Give precise instructions to help visually impaired participants find their way; for example, use "the equipment is on your left side" instead of "it's over there" and pointing.
- Maintain verbal communication with the participant when moving positions; for example, don't move from their side to behind them unannounced as it can confuse or surprise them.
- Use key words and avoid long, unnecessarily complex sentences.
- Be logical and sequential when presenting information.
- It may be helpful to draw on the palms of hands to demonstrate a point.
- It may be helpful to allow the archer to walk to and feel the target so that they can develop a mental picture of what it is and how far away it is placed.

It can prove very valuable for a coach to experience sight loss themselves by listening to coaching sessions either with eyes closed, blindfolded or using equipment which replicates a range of visual impairments (e.g. SimSpecs). It will help the coach in being able to identify whether enough information was provided and whether the techniques required were adequately described.

Orientation, Spatial Awareness and Club Management

It is important that VI archers become familiar with their shooting environment and the club. Coaches and organisers should allow enough time for archers to orientate themselves properly. It can be helpful to introduce the VI participant to someone at the venue (a club member or official) who can help them settle in. This is important for both new and experienced archers, even in facilities that they have used before.

Key considerations include:-

- Enabling an archer to navigate around the venue, highlighting key elements of the range, such as the waiting line, shooting line, equipment area(s), target line, facilities, etc.
- Highlighting potential dangers such as doorways, slippery areas or areas of uneven ground; do this at the start of every event as changes may occur in the venue from session to session. Also consider high level obstructions such as overhanging branches, the undersides of staircases, etc.
- Using a tactile board to explain the layout of the venue and the range.
- Assessing noise - will the group work verbal commands? Whistle commands can sometimes cause distraction or have an adverse effect on orientation and communication.
- Ensuring that there is an unobstructed path to the shooting line.
- Keeping equipment in a well-defined area and inform the participants of the area location.
- Showing participants where to put their equipment between ends.
- Involving visually impaired participants in all aspects of the club, including social activities.
- Enlisting the help of a family member or friend of the participant to assist with guiding.

Competitive Archery for Visually Impaired Athletes

Archery is a highly inclusive sport which enables visually impaired participants to shoot alongside normally sighted archers. The club system provides an environment within which VI archers can participate and enjoy personal skills development, competition and the social aspects of the sport.

Classification

For VI archery, the sight classifications are B1, B2 and B3. B1 athletes must wear a blindfold at all times. All visually impaired archers are classified on acuity only NOT acuity and field – see general classification section page 27 Archery is unique to other sports whereby they include competitions and events for a category known as VI Open which incorporates participants who would normally be categorised as B4 or B5. As with the other groups (B1, B2, B3) for archers, this is based on acuity only. For archery, participants must be registered blind or partially sighted and be able to show their current certification at events and competitions, as required.

Adaptation of Rules

The formal rules that need to be followed while shooting (known as the “Rules of Shooting”) are contained in documents provided by a number of organisations, including BBS Archery, the International Blind Sport Federation, World Archery and Archery GB. The contact details for each of these organisations can be found in section 4 of this guide.

Adaptation of Equipment

A range of equipment adaptations can be used by VI archers. Where a participant has some residual sight, the use of standard or modified bow sights may be possible.

Where sight is insufficient to use modified optical devices, an alternative means of aiming must be considered. In this case a back-of-the-hand tactile sighting aid is used, in combination with foot locators.

Foot locators are used to ensure a repeatable placement of the archer's feet which, in turn, helps them achieve a consistent orientation towards the target. Foot locators are often made from wood and are available to buy from British Blind Sport archery website.



The tactile sighting aid comprises two parts, a stand and the tactile device itself. Stands are typically adapted from photographic tripods, music tripods, or similar. The purpose of the stand is to enable the tactile device to be moved up and down so that adjustments in elevation of the bow can be achieved.

The function of the tactile device itself is to provide a consistent and repeatable reference point, usually against the back of the hand. This replicates the aiming that can be achieved with an optical sight. The key design points include a physical point of reference against the skin of the hand and which is sufficiently soft or springy to avoid bruising of the reference point.

Tactile devices can be produced from a number of materials. These could range from a pressure button such as might be used on a recurve bow, to rubber balls, door stops or even fibre draft excluder. In fact, anything that has a soft springy response and which provides a repeatable sensation of the hand could be pressed into service.

Tactile sights can also be sourced via the BBS Archery website, as can plans for making a number of adapter items.



Adaptation of Rounds

VI Archers can shoot standard rounds as described by Archery GB and World Archery. Typically, however, rounds with a maximum distance of 60 yards or less are most suitable for VI participation.

There are also a number of modified rounds which have been specifically established to aid participation in VI archery. These "Burntwood Rounds" provide a mechanism whereby the change in distances found in typical archery rounds is replaced with a change in the size of the target face whilst the shooting distance remains constantly at 30m for adults and 15m for juniors. This enables an archer to shoot without having to adjust foot locators and sighting aids.

The number of arrows shot at each face size will remain the same as the number of arrows shot at each distance in the traditionally recognised equivalent.

The table below details the Burntwood equivalents for a number of familiar rounds. By way of explanation, the Burntwood York comprises 12 dozen arrows shot a distance of 30m (or 15m for juniors). The first 6 dozen arrows are shot on a 40cm face, the next 4 dozen on a 60cm face and the final 2 dozen on a 80cm face.

Burntwood York	6 @40cm	4 @60cm	2 @80cm	-
Burntwood Hereford / Bristol	-	6 @60cm	4 @80cm	2 @122cm
Burntwood St. George	3 @40cm	3 @60cm	3 @80cm	-
Burntwood Albion / Windsor	-	3 @60cm	3 @80cm	3 @122cm
Burntwood Western	-	4 @60cm	4 @80cm	-
Burntwood American	-	2½ @60cm	2½ @80cm	2½ @122cm
Burntwood St. Nicholas	-	-	4 @80cm	3 @122cm
Burntwood National	-	4 @60cm	2 @80cm	-
Burntwood Warwick	-	2 @60cm	2 @80cm	-
V.I.I.R. 1	3 @40cm	3 @60cm	3 @80cm	3 @122cm
V.I.I.R. 2 equivalent to World Archery	-	3 @60cm	3 + 3 @80cm	3 @122cm
Burntwood Long Metric	3 @40cm	3 @60cm	-	-
Burntwood Short Metric	-	-	3 @80cm	3 @122cm
Burntwood M900	-	2½ @60cm	2½ @80cm	2½ @122cm
(Burntwood) Frostbite	-	-	3 @80cm	-

Burntwood rounds can be easily integrated into most competitions and club events.

About British Blind Sport Archery

The BBS archery section was formed in 1985 after tactile archery was developed. The sport has grown in popularity, is totally inclusive and suits all types of visual impairment. The section is run by volunteers who are all experienced and knowledgeable about the sport.

There are two national BBS championships for visually impaired archers.

Many archers shoot in sighted clubs and can compete equally with other archers due to the handicap system. For further information see British Blind Sport contact details on page 28.

Case study: Carmel Bassett



I was born with my eye condition. I have nystagmus, photophobia, border line glaucoma and albinism.

I am so grateful to my parents for not molly-coddling me when I was small and let me do the things other kids did, climbing trees, riding my bike etc. I'd encourage all parents with visually impaired children to do the same.

I used to take part in all the sports stuff at school: swimming, running, trampolining, football, anything really. I took up judo when I left school and loved it. I'd found a great sport that it didn't matter that I couldn't see so well. I was on an even par when we were on the mat. As I got older and couldn't do judo any more I got into circuit training and running, but archery is my love now.

How I got into archery was through a notice in the "events" section of the British Blind Sport magazine for a coaching weekend in Brighton. I went along and was made to feel really welcome by Sue, Colin and Malcolm and I was hooked! The sport was really satisfying as I found success quite quickly and was regularly hitting the target and getting scores.

As I improved and got more confident I joined an archery club near me where I improved all the time. So much so that I qualified to go to the World Para Archery Champs in Donaueschingen, Germany in 2015. Here I amazed myself and got a bronze medal in the VI Category. Absolutely magic!

Playing sport has made me a lot more confident in myself, and even though my sight has deteriorated a bit it hasn't put me off because I now have the building blocks to have a go at anything. "You never know till you give it a go" is my motto. Thanks to my long suffering husband Bob, who never puts up barriers about my sight, I have led a full and enjoyable life. Of course there have been down times, but there always are in life. However, thanks to sport I've learnt to pick myself up again and move on to the next thing!



Case study: David Poyner



At 41 I surfaced from a coma and found out that I couldn't see. Previous to this sight loss I had been a high achiever in sport as a player and international referee. I thought my life was ended as I wouldn't be able to take part in sport. That idea drove me nuts.

Then I discovered archery and I have never looked back. I have set records, won national championships and shot for Great Britain. Most of all it is sport! I guess that it has taken over my life, being a club chairman, chairman of the archery section and previously a Trustee of British Blind Sport.



Agincourt 600



The **Battle of Agincourt** took place near Azincourt, northern France on Friday 25th October 1415 and was seen as a major conquest for King Henry V and the English and Welsh in the Hundred Years' War. Although severely depleted and suffering from diseases such as dysentery, the English Army of 6000 men were able to defeat the formidable French Army of 36,000 men. The tactics of the English leading up to the battle plus the terrain were all to the benefit on the day however the English had one very crucial advantage: the long bow. Capable of shooting down the enemy from a long range, the long bow was

the deadliest of weapons and was the biggest contributing factor for the victorious Henry V and his men. This battle is notable for the use of the long bow in very large numbers, with English and Welsh archers forming the majority of Henry's army.

The terrain, along with heavy rain in the days leading up to the battle, played an integral role in its final outcome. The battleground took place on a flat, boggy plain with woods on either side. As the majority of the huge French army were on horseback, the woods and the boggy land meant that the French army could not get behind the English army and surround them and the horses struggled with the sodden ground. As a result, this significantly reduced the intensity of the French as the army had no choice but to go into battle division by division rather than a full on attack.

The conditions did not hinder the English army as most were stationary longbow archers. The longbow provided a deadly advantage by enabling to reach the French army up to 200 metres away at a rate of 17-18 arrows

per minute. The French weaponry on the day, could not counter a successful attack. Using the crossbow, which was only useful at short distances and only being able to fire 2-3 arrows a minute, the French archers proved to be ineffective whereas the English were able to maintain a steady attack from a relatively safe distance.

Henry's role cannot be underestimated. His army was not typical of the times and was specially recruited; men were well paid, well trained and disciplined. The majority of his army was comprised of expert longbowmen. Henry preferred a small, professional army, compared the large untrained force of most European armies. This gave the English a considerable organisational advantage.

At first the English planned to wait for the French to attack, but with no evidence of movement from the opposition, Henry became impatient and gave the command for the battle to commence. This gave his soldiers an early advantage over the French, who were unprepared and trying and organise themselves whilst under a deluge of longbow arrows.

Being led by a popular leader who joined his men on the field, Henry gave a rousing speech before battle commenced which provided a huge morale boost to his troops. Such a success was Henry's speech that it is referenced in Shakespeare's play 'Henry V', where Henry refers to his 'band of brothers'.

Conversely the French were led by four high ranked nobles as King Charles VI was weak and mentally ill at the time. Whilst the nobles Charles d'Albert and Boucicault were both experienced soldiers, their rank was not considered high enough from the other French nobles within the army and as such, their commands were largely ignored.

6,000 Frenchmen lost their lives during the Battle of Agincourt, while English casualties were around several hundred. Despite the odds against him, King Henry V had won one of the great victories in military history. In the March 2015 budget the Chancellor of the Exchequer announced that £1m would be allocated for commemoration of the 600th anniversary of the battle of Agincourt. The Agincourt 600 charity supports international friendship and understanding, commemoration, knowledge and shared heritage. One of the charities aims is for the advancement of the amateur sport of archery and shooting for the disabled, to support appropriate courses in archery and shooting for the disabled; contribute to the costs of these courses and the attendance at them by individuals and develop the individual capabilities, competences and skills of those involved in these courses. British Blind Sport would like to thank Agincourt 600 for their support on this project.



Photographs supplied by Agincourt 600

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Visually Impaired Acoustic Shooting

What is VI Target Shooting?

The discipline of VI shooting is a challenge of accuracy and control. Competitors use air rifles to fire a series of shots at a stationary target. VI athletes use an audio signal to guide them in their aiming, with the audio signal rising in pitch as the point of aim moves nearer to the centre of the target.

To many people the terms 'visually impaired' and 'target shooting' seem rather contradictory but the adaptive form of acoustic shooting makes the sport accessible to anyone with a visual impairment.

This resource outlines key modifications and adaptations for a VI person.

Acoustic Shooting (as the name describes) uses a sound source, which allows a VI shooter to take aim and shoot at the target.

General advice on inclusion of VI people into sport

Please see pages 9 to 14 for further information on incorporating VI people into your club and sessions.



The Target

Unlike traditional Target Shooting targets, an Acoustic Shooting Target has a white centre with graduated scales of grey, leading to a black outer ring.

This target is illuminated by an intense light aimed at the centre of the target.

Specialist Sighting System

A specialist sighting system is used which measures the amount of light being reflected from the target and converts this into sound, that a shooter can hear through headphones. As the level of light increases, so does the frequency (or pitch) of the sound. A VI shooter will aim according to the pitch that they hear. A low pitch, will mean there is little light and a shooter will be aiming at the black or grey outer rings of the target. As a shooter aims closer to the white centre where a brighter light is reflected, the pitch becomes higher. The centre of the target will be the highest pitch, so a VI shooter will take a shot when they hear the highest pitch.

The specialist sighting equipment is designed to work at a distance of 10 metres.

The Shooting Range

Due to the nature of the equipment used for acoustic shooting, air rifle/air pistol ranges are best designed for this sport. Most Visually Impaired Shooting Clubs in the UK are attached to Shooting clubs and the same facilities are used. Shooting clubs should also welcome visually impaired participants to join in with their sessions.

The Rifle

Any .177 calibre target air rifle is suitable for acoustic shooting, however only a few of the current air rifles available permit pellets to be loaded once the specialist sight is fitted.

.177 calibre (4.5mm) is the smallest size of pellets widely used in air guns and is the only calibre generally accepted in competition. Compared with larger pellets the .177 travels faster and on a flatter trajectory.

The Shooting Position

There are two different shooting positions.

1. Supported
2. Unsupported (or Freestanding)

Supported:

When VI shooters first start using this position. They use a specialist stand (Belgian Spring Stand) which takes the weight of the rifle and the stand provides a safe and controllable position. Using the supported position gives confidence to new and novice shooters.

The Belgian Spring Stand was originally developed for shooters who had lost, or lost the use of, an arm and it has been adopted for use by VI shooters.

The stand is placed on the bench and is adjustable to the height of the shooter. Although the stand takes the weight of the rifle - it is sprung, therefore has a degree of instability which mimics that of an able bodied shooter in the unsupported (freestanding) position.

Unsupported:

The unsupported or freestanding shooting position does not involve the use of a Belgium Spring Stand and the rifle is held by the shooter. It is acceptable to shoot competitively in both the supported and unsupported (freestanding) disciplines.

For those VI shooters who are unsteady on their feet or cannot stand without assistance it is fine for them to sit on a backless chair or stool. This must not have a backrest as it can give unfair support and therefore provide the shooter with an unfair advantage.

For shooters with other impairments additional aids or adaptations may be required. Exemption

certificates, which enable the use of additional aids, and ensure anyone with an impairment can compete, can be obtained from the National Small-bore Rifle Association.

Sighted Assistants

In VI shooting, each shooter will have their own Sighted Assistant.

The role of the sighted assistant is to: ensure safety, guide the VI shooter onto the target (using verbal cues), make adjustments to the rifle and inform the VI shooter of the value of each shot.

A sighted assistant should position their shooter and ensure that the rifle is “naturally on aim” this means that the rifle points directly towards the target each time it is picked up and placed on the stand.

A sighted assistant must ensure that their shooter is able to hear them, when they are wearing the headphones.

The sighted assistant will stand behind the shooter and look over their shoulder along the line of the barrel.



By looking along the barrel from both the top and side, the sighted assistant can guide the VI shooter to the target using verbal instructions (i.e. left, right, up, down).

Verbal instructions must be kept at a minimum and communication must remain as quiet as possible to avoid distracting other shooters.

After each shot, the sighted assistant can inform the VI shooter of the value of the shot with an indication of where it is in relation to the bulls eye. A great way to describe the position of a shot is to refer the face of clock ie: “you got a score of 9 at about 4 o’clock”.

Below is a list of some handy tips for a sighted assistant:

Do:

- Load the rifle and change the target if necessary.
- Adjust the sights.
- Adjust the spring stand.
- Give verbal cues to help the VI shooter acquire the target.

Don't

- Push, pull or otherwise physically help to aim the rifle. However, safety is paramount and it may be necessary to intervene to avoid an accident.

Coaching VI Shooters

When introducing anyone new to the sport, give detailed descriptions about the equipment, the space in which the person is shooting and the environment.

Allow the VI person to feel the rifle and other equipment to orientate themselves with the equipment and understand how it works.

Health and Safety

Shooting is a very safe sport.

On the range there will always be at least one qualified Range Conducting Officer who has overall responsibility for range safety.

Each VI shooter has a sighted assistant who is responsible for ensuring their safety.

A shooting range is designed to ensure that in the event of a stray shot, it will be contained in such a way that nothing can escape and cannot cause injury or damage.

Integrating VI Shooters into Clubs

The majority of VI shooting clubs in the UK are a part of existing shooting clubs. Clubs are encouraged to integrate VI shooters into their clubs. Clubs would need to purchase specific equipment for VI shooters – there is often grant aid for this. The average cost per set is approximately £2500.

Where there is not an appropriate club nearby, BBS can support the set up of a club in local facilities e.g. the village hall. In this case, because it is likely that the helpers will not be experienced shooters, additional training and guidance can be provided.

Classification

Since the ability to see has no influence on results achieved using acoustic shooting equipment, it has been decided that in the UK there is not a need to classify athletes into groups of similar level of visual impairment.



Competitions

British Blind Sport hosts a National Shooting Championships annually. This competition includes the supported and unsupported (freestanding) disciplines. The supported event is split into three classes according to shooters average, whilst the unsupported event is divided into two classes. The course of fire in all events consists of 60 competitions shots within a total time limit of 1 hour 45 minutes.

Local clubs often organise their own internal competitions amongst members and occasionally will hold events against other local clubs.

Nationally, summer and winter leagues are organised with competitors placed into divisions, according to their shooting average.

A division consists of six individuals each shooting against each other twice during a season.

The course of fire consists of 10 shots per round with 10 rounds per season.

These leagues run as a postal system, whereby individuals shoot at their home range and send their targets to a central scorer who issues the results and prizes.

Although strong in the UK and a number of other countries, VI shooting is not currently included in the Paralympic Games. Moves are continuing to increase interest in International events with Paralympics being the ultimate goal.

Case study: Jenna Mistry



Jenna was inspired by the London 2012 Paralympic Games to try sport and after giving a few sports ago, she found she loved acoustic shooting.

“I loved the coverage and buzz of the Paralympic Games and I just wanted to get involved in sport. I phoned British Blind Sport to find what sports I could take part in near me. I was given information about a disabled horse riding club, a cycling session and also a local shooting club.

VITS Shooting Club, 49th Rifles let me try out at the club for a few weeks to see if the sport of shooting was right for me. I really wanted to commit and now I shoot every two weeks. I would go every week if I could! I really enjoy it

and I love group, we have a laugh and a joke and we all gel. We are all equal. It's a great balance between social and sport activity.

When I first started, I had to stand on some telephone directories, because I am short. But now I have a specially made wooden platform which the club made for me. I love VI shooting and would highly recommend it to anyone with sight loss... it's great!”

General Classifications

Sight classifications are important as they ensure a fair and equal competition. Success at competitions should be defined by an athlete's skill and ability, not their impairment. The sight classifications should give all athletes the confidence that they are competing against others equally. The classification process groups athletes with similar level of visual impairments together.

British Blind Sport records classifications as B1, B2, B3, B4 and B5. Sight classifications are based on the visual acuity and visual field of the athlete. The classification will be based on best correction (such as lenses) in the best eye. To be classified into a category, participants either need the required acuity level or the required field level, not both. The classification categories are detailed below:

Classification Acuity Field

B1

- From no light perception up to and including hand movements.
- or Not applicable.

B2

- From counting fingers at any distance to a visual acuity of up to and including 2/60.
- or A field of 5 degrees or less.

B3

- From a visual acuity above 2/60 to a visual acuity of up to and including 6/60.
- or A field of more than 5 degrees and less than 20 degrees.

B4

- From a visual acuity above 6/60 to a visual acuity of up to and including 6/24.
- or Not applicable.

B5

- From a visual acuity above 6/24.
- Or Not applicable.

Only B1, B2 and B3 domestic classification are recognised internationally and for major domestic competitions. National Governing Bodies of sport are responsible for deciding whether B4 and B5 players are eligible to compete in their VI competitions.

British Blind Sport classifications are relevant for people who want to compete in domestic or recreational competitions. Individuals can receive their classification by joining British Blind Sport. Membership is low cost and includes a free sight classification. For more information visit britishblindsport.org.uk/classification

For international competitions, an athlete will need a classification that is sanctioned at an International Blind Sports Federation event. IBSA classifications are stringent for all sports and medical evidence will need to be provided by each athlete.

For more information visit IBSA at www.ibsasport.org/classification



Further Information

Resources and Guidance

British Blind Sport

- Telephone: 01926 424247
- Email: info@britishblindsport.org.uk
- Website: www.britishblindsport.org.uk

British Blind Sport Archery

- Telephone: 01926 424247
- Email: secretary@bbsarchery.org.uk
- Website: www.bbsarchery.org.uk

British Blind Sport Shooting

- Telephone: 01926 424247
- E-mail: info@britishblindsport.org.uk
- Website: www.britishblindsport.org.uk

Archery GB

- Telephone: 01952 677 888
- Email: enquiries@archeryGB.org
- Website: www.archeryGB.org

National Smallbore Rifle Association

- Telephone: 01483 485503
- Website: www.nsra.co.uk

Creating accessible content and literature

The English Federation of Disability Sport have produced an inclusive communications guide. It offers guidance in providing information in accessible formats for people with a variety of impairments:

- Website: www.bit.ly/efdsguide

Sports Coach UK Visual Impairment Factsheet

Sports Coach UK and British Blind Sport have produced a factsheet that highlights the fundamentals of coaching visually impaired people:

- PDF document: www.bit.ly/scukfact

Action for Blind People

- Telephone: 0303 123 999
- Website: www.actionforblindpeople.org.uk

Royal National Institute for the Blind (RNIB)

- Telephone: 0303 123 999
- Website: www.rnib.org.uk

Guide Dogs

- Telephone: 0118 983 5555
- Website: www.guidedogs.org.uk

Sport England

- Telephone: 08458 508508
- Website: www.sportengland.org

English Federation of Disability Sport

- Telephone: 01509 227750
- Website: www.efds.co.uk

International Paralympic Committee

- Telephone: +49-228-2097-200
- Website: www.paralympic.org

International Blind Sport Federation

- Website: www.ibsasport.org

About British Blind Sport

At British Blind Sport we help blind and partially sighted people get active and play sport. Sport and recreational activities can enhance the lives of people with visual impairments by improving their health and increasing their social interaction. We encourage adults and children to participate in activities at all levels, from grassroots to the Paralympic Games.

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What does British Blind Sport do?

- Organise sporting competitions for people with visual impairments, allowing them to compete against others.
- Support people with visual impairments within the sports world.
- Provide sight classifications to blind and partially sighted athletes to ensure a fair and equal competition.
- Support the education of teachers to ensure no child with visual impairment is denied the opportunity to play.
- Provide advice to clubs and coaches to enable more people with visual impairments to participate in sport.





British Blind Sport is the leading voice for the blind and partially sighted community in sport and recreation in United Kingdom.

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